

## Chapter 296-811 WAC

### FIRE BRIGADES

#### NEW SECTION

**WAC 296-811-100 Scope.** This chapter applies if you choose to establish a fire brigade.

**Definition:**

A fire brigade is an organized group of employees whose primary employment is other than fire fighting but who are knowledgeable, trained, and skilled in specialized fire fighting operations based on site-specific hazards present at a single commercial facility or facilities under the same management.

**Note:** Nothing in this chapter requires you to establish an employee fire brigade.

#### NEW SECTION

**WAC 296-811-200 Section contents.**

**Your responsibility:**

To decide on brigade functions in the workplace and make sure brigade members are capable of doing them.

Organizing statement

WAC 296-811-20005.


Physical capability of brigade members

WAC 296-811-20010.

#### NEW SECTION

**WAC 296-811-20005 Organizing statement.**

**You must:**

 Develop a written fire brigade policy that is available for inspection by employees or their designated representatives,

that covers all of the following:

- The role and responsibilities of the fire brigade in the workplace.
- The basic organizational structure of the fire brigade.
- The number of brigade members.
- Type, amount, and frequency of training for brigade members according to the section Fire fighting training, WAC 296-811-30010, in this chapter.

**Note:** You may also want to include:

- ✎ Descriptions of brigade member duties.
- ✎ Line authority of each brigade officer.
- ✎ Number of brigade officers.
- ✎ Number of training instructors.

## NEW SECTION

### **WAC 296-811-20010 Physical capability of brigade members.**

#### **You must:**

✎ Make sure brigade members who are assigned to fight interior structural fires are physically capable of doing this activity.

- Do not permit employees with known physical limitations that can be reasonably identified, such as heart disease or seizure disorder, to participate in structural fire fighting activities unless the employee has been released by a physician to do so.

**Note:** Not all brigade members need to be physically capable of fighting interior structural fires. Brigade members who are not physically capable of fighting interior structural fires may be assigned to other brigade duties that match their physical capabilities, such as pump operation or fire prevention inspection.

## NEW SECTION

### **WAC 296-811-300 Section contents.**

#### **Your responsibility:**

To inform brigade members of special hazards in the workplace and train them for their brigade functions.

Special hazards

WAC 296-811-30005.

Fire fighting training

WAC 296-811-30010.

NEW SECTION

**WAC 296-811-30005 Special hazards.**

**You must:**

✎ Develop, include in training, and make available to brigade members, written procedures that describe the following:

- The special hazards they may encounter in their workplace.

- The actions they need to take in situations that involve these hazards.

✎ Inform brigade members of any changes to those hazards, or the actions to take, when changes happen.

- Examples of special hazards include storing and using flammable liquids and gases, toxic chemicals, and radioactive substances.

NEW SECTION

**WAC 296-811-30010 Fire fighting training.**

**You must:**

✎ Make sure training that a brigade member receives elsewhere that meets one or more requirements in Table 1, Training for brigade members, has been:

- Received within the past year;
- Documented as having been received, such as with a completion certificate.

✎ Provide training frequently enough to keep brigade members able to do their functions satisfactorily and safely.

**Note:** You may choose to train more often, monthly or even weekly, for some equipment or techniques. Consult fire training resources, such as the International Fire Service Training Association, the National Fire Protection Association (NFPA), or the International Society of Fire Service Instructors, for recommendations about fire training schools or programs.

✎ Make sure brigade members are trained according to Table 1, Training for Brigade Members.

**Table 1: Training for Brigade Members**

For these brigade members	Provide training that is	At these times
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All brigade members, including leaders, trainers, and incident commanders.	<p>✎ Appropriate to their assigned duties and functions.</p> <p>✎ Appropriate to special hazards in the workplace.</p> <p>✎ Similar to that of reputable fire training schools.</p> <p>✎ A combination of hands-on and classroom experiences.</p> <p>✎ Suited to the industry you are part of, such as oil refining or chemical processing.</p>	<p>✎ Initially before they do any fire brigade emergency activities;</p> <p><b>AND</b></p> <p>✎ Every year after initial training.</p>
Brigade members assigned to do interior structural fire fighting.	<p>All of the above <b>plus</b> the following:</p> <p>✎ Specific training in interior structural fire fighting.</p>	<p>At the above times <b>plus</b> the following:</p> <p>✎ Every quarter.</p>
Brigade members assigned as leaders, training instructors, or both.	<p>All of the above <b>plus</b> the following:</p> <p>✎ Additional training that is more comprehensive than that of other brigade members and appropriate to their assigned duties and functions.</p>	<p>As needed to maintain their expertise at a higher level than that of other brigade members.</p>

## NEW SECTION

### **WAC 296-811-400 Section contents.**

#### **Your responsibility:**

To provide brigade members with equipment and protective clothing appropriate for their brigade functions.

Fire fighting equipment

WAC 296-811-40005.

Protective clothing

WAC 296-811-40010.

Respiratory protective devices

WAC 296-811-40015.

## NEW SECTION

### **WAC 296-811-40005 Fire fighting equipment.**

#### **You must:**

✎ Provide appropriate fire fighting equipment for the fire brigade.

✎ Inspect and maintain brigade fire fighting equipment according to Table 2, Fire Brigade Equipment Inspection and Maintenance.

**Table 2: Fire Brigade Equipment Inspection and Maintenance**

<b>For this equipment</b>	<b>Do the following</b>
All brigade fire fighting equipment.	<ul style="list-style-type: none"><li>✎ Inspect at least every year.</li><li>✎ Maintain in safe operating condition.</li><li>✎ Replace if damaged or in unsafe condition.</li></ul>
Brigade respirators and portable fire extinguishers.	Inspect at least every month.

## NEW SECTION

### **WAC 296-811-40010 Protective clothing.**

#### **You must:**

✎ Provide appropriate protective clothing for fire brigade members who do interior structural fire fighting. Make sure protective clothing is:

- Provided at no cost.
- Meets the requirements for foot, body, hand, eye, face, and head protection found in another chapter, Safety standards for fire fighters, chapter 296-305 WAC.

#### **Exemption:**

- ✎ Protective clothing requirements do not apply to the following fire brigade members:
- Those who don't perform interior structural fire fighting.
  - Those who use only standpipe systems or portable fire extinguishers to control or put out fires that are in the incipient stage only.

## NEW SECTION

### **WAC 296-811-40015 Self-contained breathing apparatuses (SCBAs).**

#### **You must:**

✍ Provide SCBAs, other than escape self-contained breathing apparatuses (ESCBAs), and make sure they are used by fire brigade members who do interior structural fire fighting.

✍ Make sure SCBAs do the following:

- Meet the requirements found in another chapter, Respirators, chapter 296-842 WAC.

- Are positive-pressure or pressure-demand type, or can be set that way when used for interior structural fire fighting.

- Use only compressed-air cylinders that both:

- ✂ Meet DOT and NIOSH requirements;

#### **AND**

- ✂ Have the same capacity and pressure ratings as the SCBA's original cylinder(s).

- Have a service life of at least thirty minutes, as required by 42 CFR, Part 84.

- Have an automatic alarm that can be heard when seventy-five to eighty percent of its service life has been used up.

**Note:** ✍ An SCBA can have a quick-disconnect valve or "buddy breathing" accessory **only if** the valve or accessory **does not** do any of the following:

- Damage the SCBA.

- Restrict the SCBA's air flow.

- Interfere with the SCBA's normal operation.

- The "buddy breathing" accessory or quick-disconnect valve need not be certified by the National Institute for Occupational Safety and Health (NIOSH).

## NEW SECTION

### **WAC 296-811-500 Section contents.**

#### **Your responsibility:**

To make sure brigade members use safe practices during interior structural fire fighting.

Brigade members in interior structural fires

WAC 296-811-50005.

## NEW SECTION

### **WAC 296-811-50005 Brigade members in interior structural fires.**

#### **IMPORTANT:**

Nothing in this section is meant to prevent fire brigade members assigned to respond to fires from rescue activities in an immediately dangerous to life and health (IDLH) atmosphere before the whole team assigned to respond to fires has arrived.

#### **You must:**

✍ Make sure at least two qualified fire brigade members go together into an IDLH atmosphere and remain in visual or voice contact with each other at all times.

✍ Maintain standby assistance, with two people, as required by another section, Standby requirements for immediately dangerous to life or health (IDLH) conditions, WAC 296-842-19005.

**Note:** One of the two brigade members providing standby assistance can be assigned another role, such as safety officer, as long as the safety or health of any fire fighter working the incident will not be jeopardized if the brigade member becomes unavailable through giving assistance or rescue.

## NEW SECTION

### **WAC 296-811-600 Definitions.**

#### **Buddy-breathing device**

An equipment accessory for self-contained breathing apparatus (SCBA) that permits a second person (a "buddy") to share the air supply used by the SCBA wearer.

#### **Extinguisher classification**

The letter classification given an extinguisher to designate the class or classes of fires on which that extinguisher will be effective. For example, use a Class A extinguisher on a Class A fire. See also fire classifications.

Portable fire extinguishers are classified for use on certain classes of fires and are rated within that class for relative extinguishing effectiveness at a temperature of plus 70°F by nationally recognized testing laboratories. This is based upon fire classifications and fire extinguishment potentials as determined by fire tests.

**Note:** The classification and rating system described in this section is used by Underwriters' Laboratories, Inc., and Underwriters' Laboratories of Canada, and is based on extinguishing preplanned fires of determined size and description as follows:

Extinguisher Class	Fire Test for Classification and Rating
Class A	Wood and excelsior fires excluding deep-seated conditions.
Class B	Two-inch depth gasoline fires in square pans.
Class C	No fire test. Agent must be a nonconductor of electricity.
Class D	Special tests on specific combustible metal fires.

**Extinguisher rating (see also "extinguisher classification")**

The numerical rating, such as 2A, given to an extinguisher that indicates the extinguishing potential of the unit based on standardized tests developed by Underwriters' Laboratories, Inc.

#### **Fire brigade**

An organized group of employees whose primary employment is other than fire fighting but who are knowledgeable, trained, and skilled in specialized fire fighting operations based on site-specific hazards present at a single commercial facility or facilities under the same management.

#### **Fire classifications**

Fires are classified based on the types of burning materials:

Fire Class	Types of Burning Materials
Class A	Fires involving ordinary combustible materials such as paper, wood, cloth, and some rubber and plastic materials.
Class B	Fires involving flammable or combustible liquids, flammable gases, greases, and similar materials, and some rubber and plastic materials.
Class C	Fires involving energized (live) electrical equipment where it is important that the extinguishing agent not conduct electricity. (When electrical equipment is de-energized, it is safe to use an extinguisher for Class A or B fires on it, since electricity is not an issue then.)
Class D	Fire involving combustible metals such as magnesium, titanium, zirconium, sodium, lithium, and potassium.

#### **Incipient fire stage**

A fire in the beginning stage that can be controlled or put out by portable fire extinguishers, or Class II standpipe or small hose systems, without the need for protective clothing or breathing apparatus.

#### **Inspection**

A visual check of fire protection systems and equipment to ensure they are in place, charged, and ready for use if there is



a fire.

**Interior structural fire fighting**

The physical activity of suppressing fire, rescuing people, or both, inside buildings or enclosed structures involved in a fire that is past the incipient stage.

**Maintenance**

Servicing fire protection equipment and systems to ensure they will perform as expected if there is a fire. Maintenance differs from inspection in that maintenance requires checking internal fittings, devices, and agent supplies, as well as correcting deficiencies found.

**Positive-pressure breathing apparatus**

Self-contained breathing apparatus (SCBA) in which the air pressure in the breathing zone is higher than that of the immediate environment during both inhaling and exhaling.

**Quick-disconnect valve**

A device that starts the flow of air when the hose from the facepiece is inserted into the regulator of a self-contained breathing apparatus (SCBA), and stops the flow of air when the hose is disconnected from the regulator.

AMENDATORY SECTION (Amending WSR 03-06-076, filed 3/4/03, effective 8/1/03)

**WAC 296-78-71011 Egress and exit.** (1) In all enclosed buildings, means of egress shall be provided in accordance with the provisions of WAC 296-800-310.

(2) All swinging doors shall be provided with windows, the bottom of which shall be not more than forty-eight inches above the floor. One window shall be provided for each section of double swinging doors. All such windows shall be of shatter proof or safety glass unless otherwise protected against breakage.

(3) Outside exits shall open outward. Where sliding doors are used as exits, an inner door not less than two feet six inches by six feet shall be cut inside each of the main doors and arranged to open outward.

(4) At least two fire escapes or substantial outside stairways, shall be provided for mill buildings where the floor level is more than eight feet above the ground.

(a) Buildings over one hundred fifty feet in length shall have at least one additional fire escape or substantial outside stairway for each additional one hundred fifty feet of length or fraction thereof.

(b) Passageways to fire escapes or outside stairways shall be marked and kept free of obstructions at all times.

(c) Fire protection. The requirements of (~~Part G2 (Fire Protection)~~ and ~~Part G3 (Fire Suppression Equipment)~~,) chapter 296-24 WAC, Part G-3 of the general safety and health standard, and WAC 296-800-300 of the safety and health core rules, and chapter 296-811 WAC, Fire brigades, shall be complied with in providing the necessary fire protection for sawmills.

(d) Fire drills shall be held at least quarterly and shall be documented.

(5) Where a doorway opens upon a roadway, railroad track, or upon a tramway or dock over which vehicles travel, a barricade or other safeguard and a warning sign shall be placed to prevent workers from stepping directly into moving traffic.

(6) Tramways and trestles shall be substantially supported by piling or framed bent construction which shall be frequently inspected and maintained in good repair at all times. Tramways or trestles used both for vehicular and pedestrian traffic shall have a walkway with standard hand rail at the outer edge and shear timber on the inner edge, and shall provide three feet clearance to vehicles. When walkways cross over other

thoroughfares, they shall be solidly fenced at the outer edge to a height of 42 inches over such thoroughfares.

(7) Where tramways and trestles are built over railroads they shall have a vertical clearance of twenty-two feet above the top of the rails. When constructed over carrier docks or roads, they shall have a vertical clearance of not less than six feet above the drivers foot rest on the carrier, and in no event shall this clearance be less than twelve feet from the surface of the lower roadway or dock.

(8) Walkways (either temporary or permanent) shall be not less than twenty-four inches wide and two inches thick, nominal size, securely fastened at each end. When such walkways are used on an incline the angle shall not be greater than twenty degrees from horizontal.

(9) Walkways from the shore or dock to floats or barges shall be securely fastened at the shore end only and clear space provided for the other end to adjust itself to the height of the water.

(10) Cleats of one by four inch material shall be fastened securely across walkways at uniform intervals of eighteen inches whenever the grade is sufficient to create a slipping hazard.

AMENDATORY SECTION (Amending WSR 01-11-038, filed 5/9/01,  
effective 9/1/01)

**WAC 296-79-040 Fire protection, ignition sources and means of egress.** For fire protection, ignition source, and means of egress requirements see chapter 296-24 WAC, Parts G-1((, ~~G-2~~)) and G-3 ((and)), WAC 296-800-300 of the safety and health core rules, and chapter 296-811 WAC, Fire brigades.

AMENDATORY SECTION (Amending WSR 01-11-038, filed 5/9/01, effective 9/1/01)

**WAC 296-305-01003 Scope and application.** (1) The rules of this chapter shall apply with respect to any and all activities, operations and equipment of employers and employees involved in providing fire protection services which are subject to the provisions of the Washington Industrial Safety and Health Act of 1973 (chapter 49.17 RCW).

(2) The provisions of this chapter apply to all fire fighters and their work places, including the fire combat scene. Although enforcement of applicable standards will result from provable violations of these standards at the fire combat scene, agents of the department will not act in any manner that will reduce or interfere with the effectiveness of the emergency response of a fire fighting unit. Activities directly related to the combating of a fire will not be subjected to the immediate restraint provisions of RCW 49.17.130.

(3) In the development of this document many consensus standards of the industry were considered and evaluated as to adaptability to the Washington state fire service industry. Where adaptable and meaningful, the fire fighter safety elements of these standards were incorporated into this WAC. Chapter 296-305 WAC, shall be considered as the fire fighter safety standards for the state of Washington.

(4) The provisions of this chapter cover existing requirements that apply to all fire departments. All fire departments shall have in place their own policy statement and operating instructions that meet or exceed these requirements. This chapter contains state and/or federal performance criteria that fire departments shall meet.

(5) Unless specifically stated otherwise by rule, if a duplication of regulations, or a conflict exists between the rules regulating wildland fire fighting and other rules in the chapter, only the rules regulating wildland fire fighting shall apply to wildland fire fighting activities and equipment.

(6) The provisions of this chapter shall be supplemented by the provisions of the general safety and health standards of the department of labor and industries, chapters 296-24 (~~((including Part C-2, Fire protection))~~), 296-62 (~~((and))~~), 296-800, and 296-811 WAC. In the event of conflict between any provision(s) of this chapter and any provision(s) of the general safety and health standards, the provision(s) of this chapter shall apply.

(7) The provisions of this standard do not apply to

industrial fire brigades, as defined in this chapter. Industrial fire brigades are covered under the provisions of chapter ((~~296-24 WAC, Part G-2, Fire protection~~)) 296-811 WAC, Fire brigades.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 296-24-58505	Fire brigades.
WAC 296-24-58507	Organization.
WAC 296-24-58509	Training and education.
WAC 296-24-58511	Fire fighting equipment.
WAC 296-24-58513	Protective clothing.
WAC 296-24-58515	Respiratory protection devices.
WAC 296-24-58516	Procedures for interior structural fire fighting.
WAC 296-24-58517	Appendix A--Fire brigades.